



From formulas to functions through geometry: a path to understanding algebraic computations [

2021

text (article)

Analítica

The teaching of algebra at the secondary school level has faced a great revolution during the last 50 years. While previously, it was focused on technicisms and pure syntactic rules, the most modern trends recommend using a functional approach to algebra and giving more prominence to conversions among different representation registers than treatments as simplifications and expansions. Nowadays, the daily practice in teaching algebra is still influenced by the traditional approach, and there is a need to offer teachers examples of activities that can give meaning to algebraic computations. This study proposes a set of interactive activities for eighth grade students, with a functional approach to formulas in a geometric context. The goal of the study is to investigate how similar activities can help students to develop multiple approaches to problems, understand algebraic formulas, and discern which main problems they face. The activities were tested with about 300 students, and qualitative and quantitative data were analyzed to answer the research questions

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbgVlcmF0aW9uOmVzLmJhcmF0ei5yZW4vMzE1MTcxMjE>

Título: From formulas to functions through geometry: a path to understanding algebraic computations electronic resource]

Editorial: 2021

Tipo Audiovisual: algebraic formulas algebraic modelling interactive technologies mathematics education representations

Documento fuente: EJIHPE: European Journal of Investigation in Health, Psychology and Education, ISSN 2174-8144, Vol. 11, Nº. 4, 2021, pags. 1485-1502

Nota general: application/pdf

Restricciones de acceso: Open access content. Open access content star

Condiciones de uso y reproducción: LICENCIA DE USO: Los documentos a texto completo incluidos en Dialnet son de acceso libre y propiedad de sus autores y/o editores. Por tanto, cualquier acto de reproducción, distribución, comunicación pública y/o transformación total o parcial requiere el consentimiento expreso y escrito de aquéllos. Cualquier enlace al texto completo de estos documentos deberá hacerse a través de la URL oficial de éstos en

Dialnet. Más información: <https://dialnet.unirioja.es/info/derechosOAI> | INTELLECTUAL PROPERTY RIGHTS STATEMENT: Full text documents hosted by Dialnet are protected by copyright and/or related rights. This digital object is accessible without charge, but its use is subject to the licensing conditions set by its authors or editors. Unless expressly stated otherwise in the licensing conditions, you are free to linking, browsing, printing and making a copy for your own personal purposes. All other acts of reproduction and communication to the public are subject to the licensing conditions expressed by editors and authors and require consent from them. Any link to this document should be made using its official URL in Dialnet. More info: <https://dialnet.unirioja.es/info/derechosOAI>

Lengua: English

Enlace a fuente de información: EJIHPE: European Journal of Investigation in Health, Psychology and Education, ISSN 2174-8144, Vol. 11, N°. 4, 2021, pags. 1485-1502

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es